

Aggregate Water-Use Data Rhode Island

*Comparison of Data Characteristics
for the Blackstone and Pawcatuck
Pilot Basins*

WAP Registration Sub-Committee

11/22/2002

Objectives

- Identify sources of water-use data
- Compare & contrast data for pilot basins
- Identify potential gaps in water-use data collection

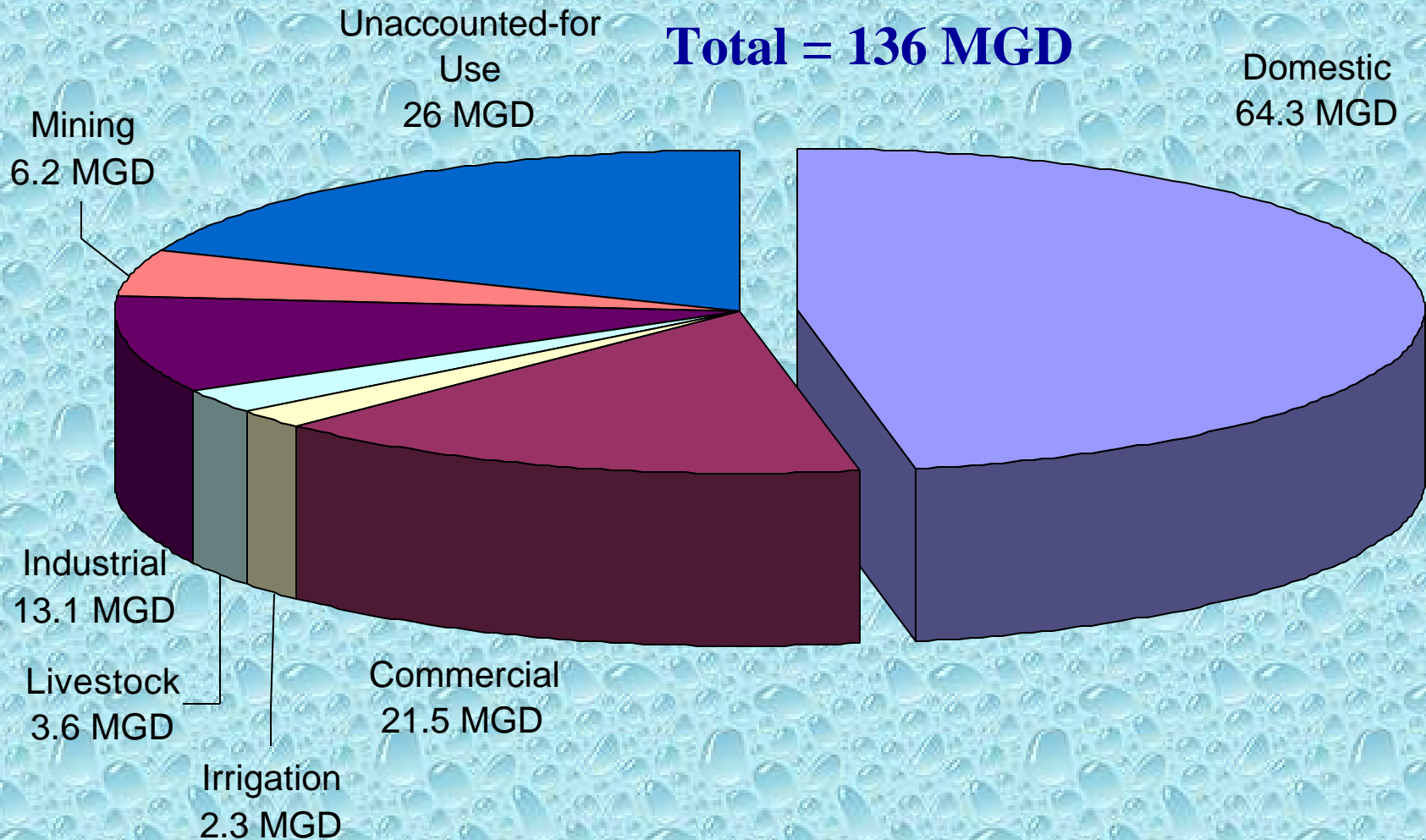
Data Sources

- US Geological Survey, Estimated Use of Water in the United States in 1995, USGS Circular 1200
- Water Supply System Management Plans (1997, 1998 compiled by M. Terebus, 2002)
- Soon – USGS Water Use studies

Annual Water Use Data Summary

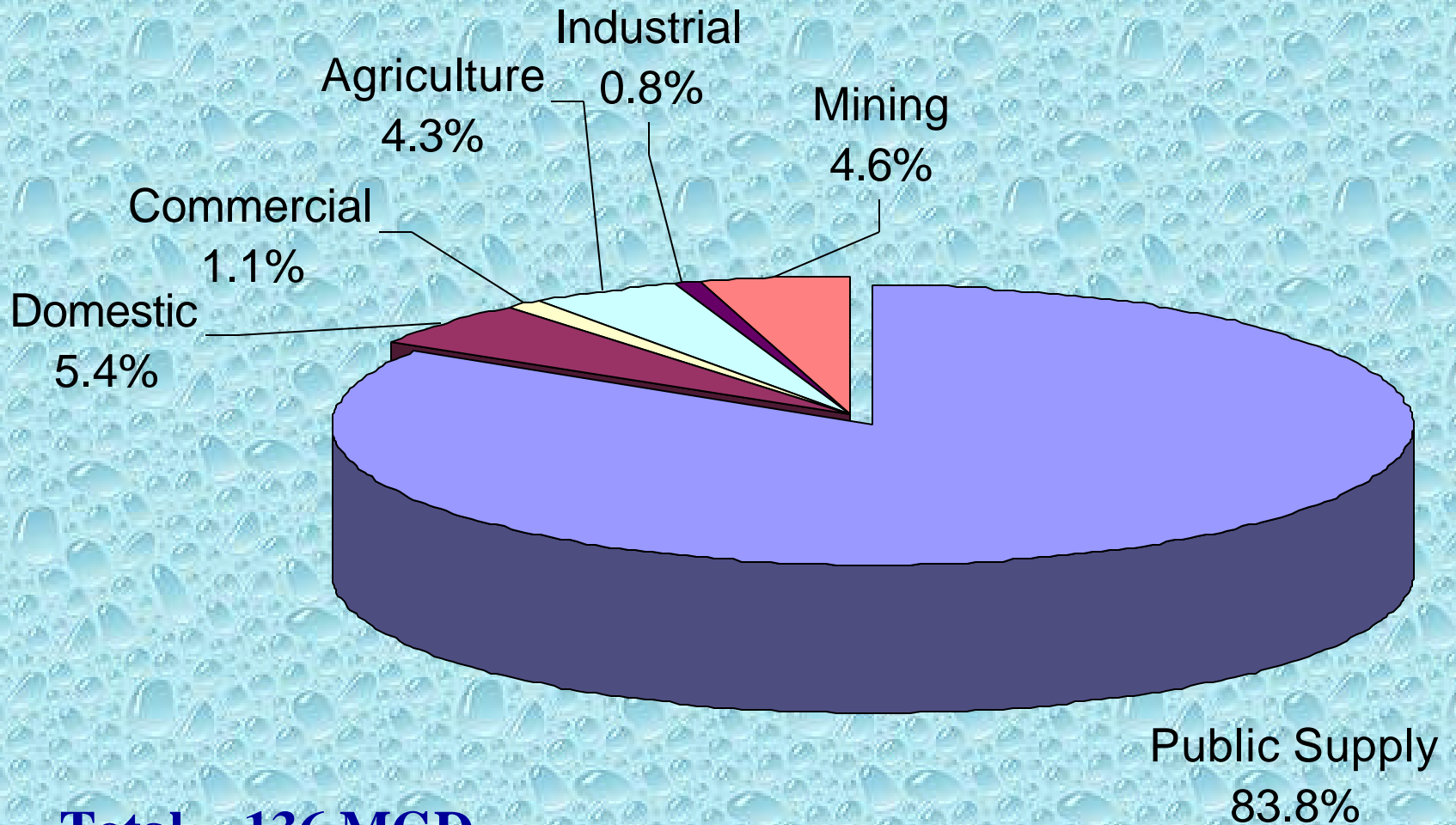


Total Withdrawals by Water-Use Category - Rhode Island 1995



Data from: Estimated Use of Water in the
United States in 1995, USGS Circular 1200

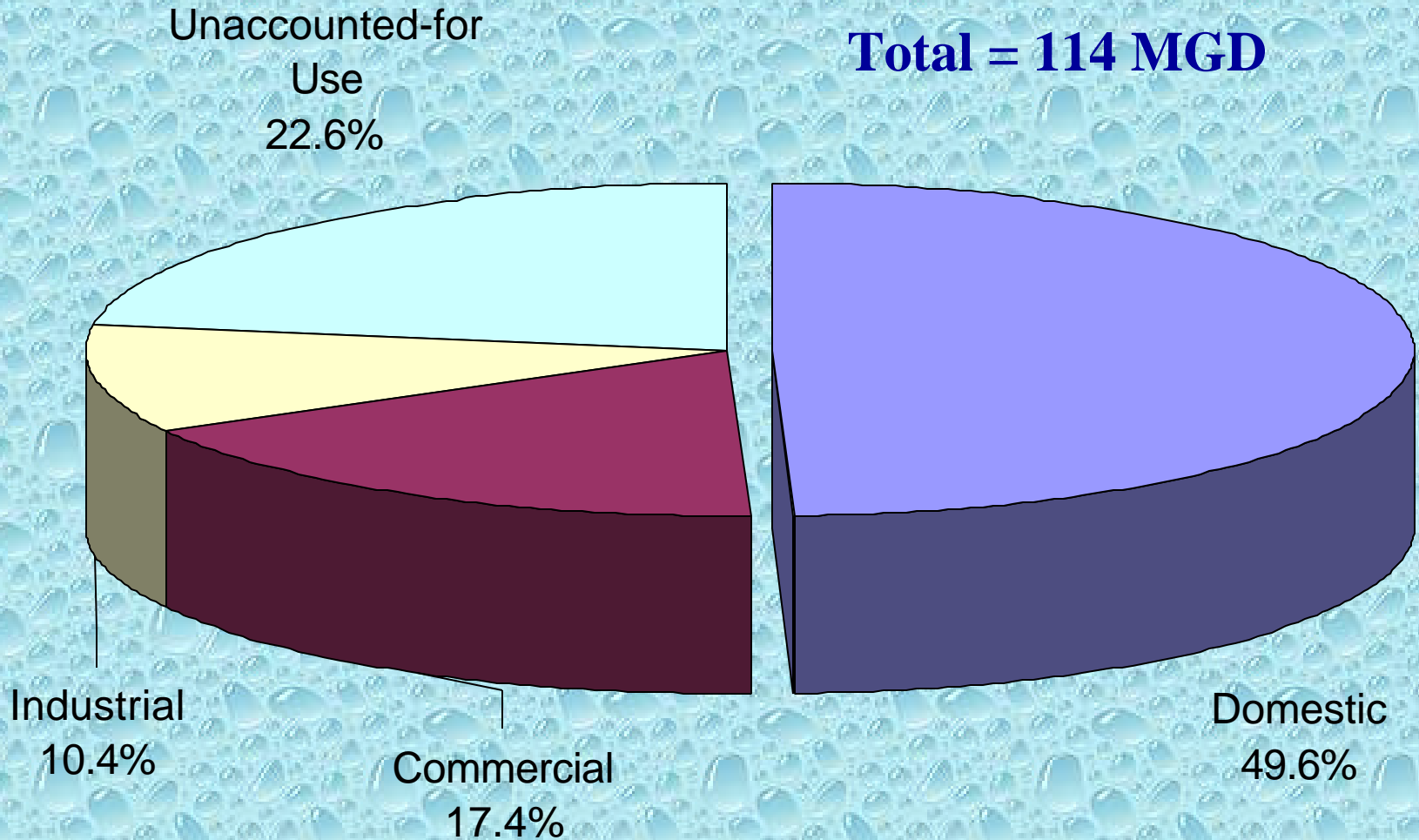
Total Withdrawals by Category - Rhode Island 1995



Total = 136 MGD

Data from: Estimated Use of Water in the
United States in 1995, USGS Circular 1200

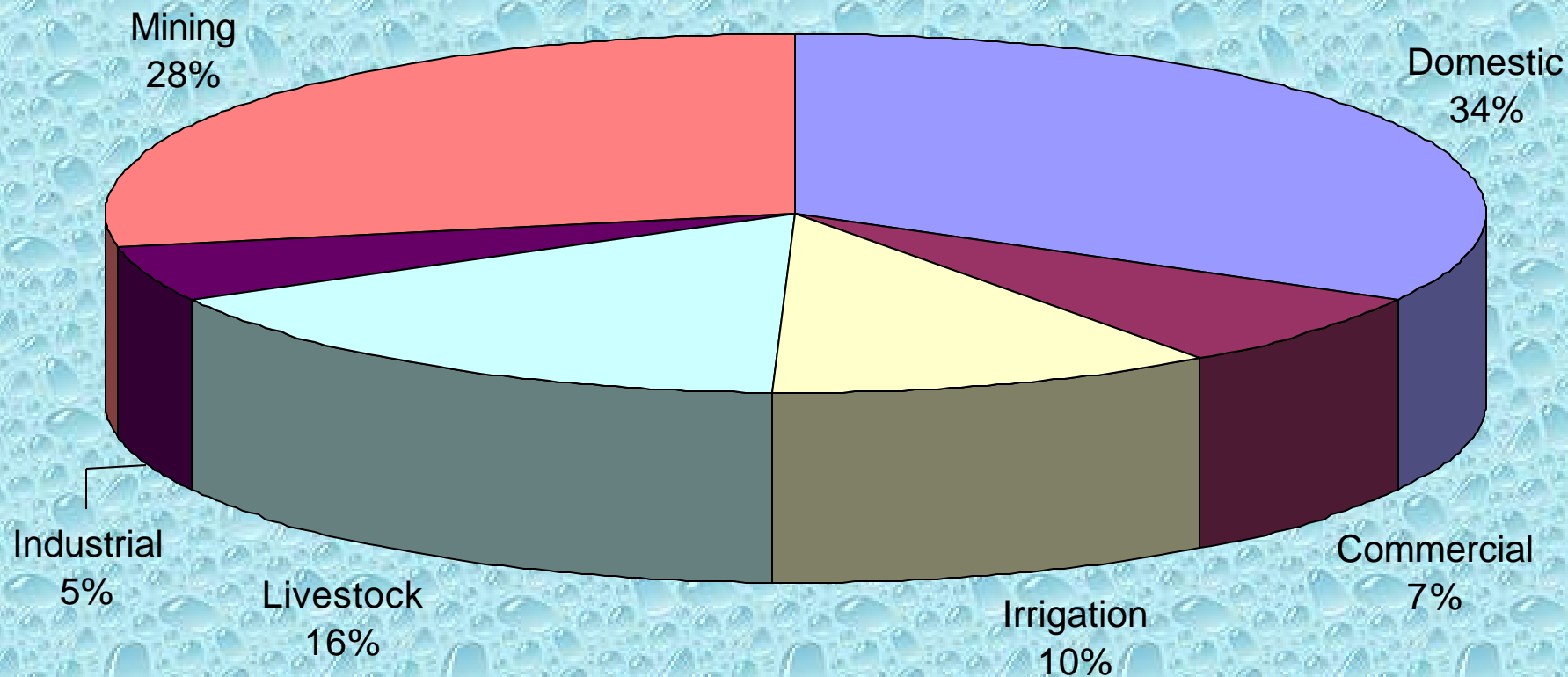
Pubic-Supply Freshwater Use by Category - Rhode Island 1995



Data from: Estimated Use of Water in the
United States in 1995, USGS Circular 1200

Self-Supply Withdrawals by Category - Rhode Island 1995

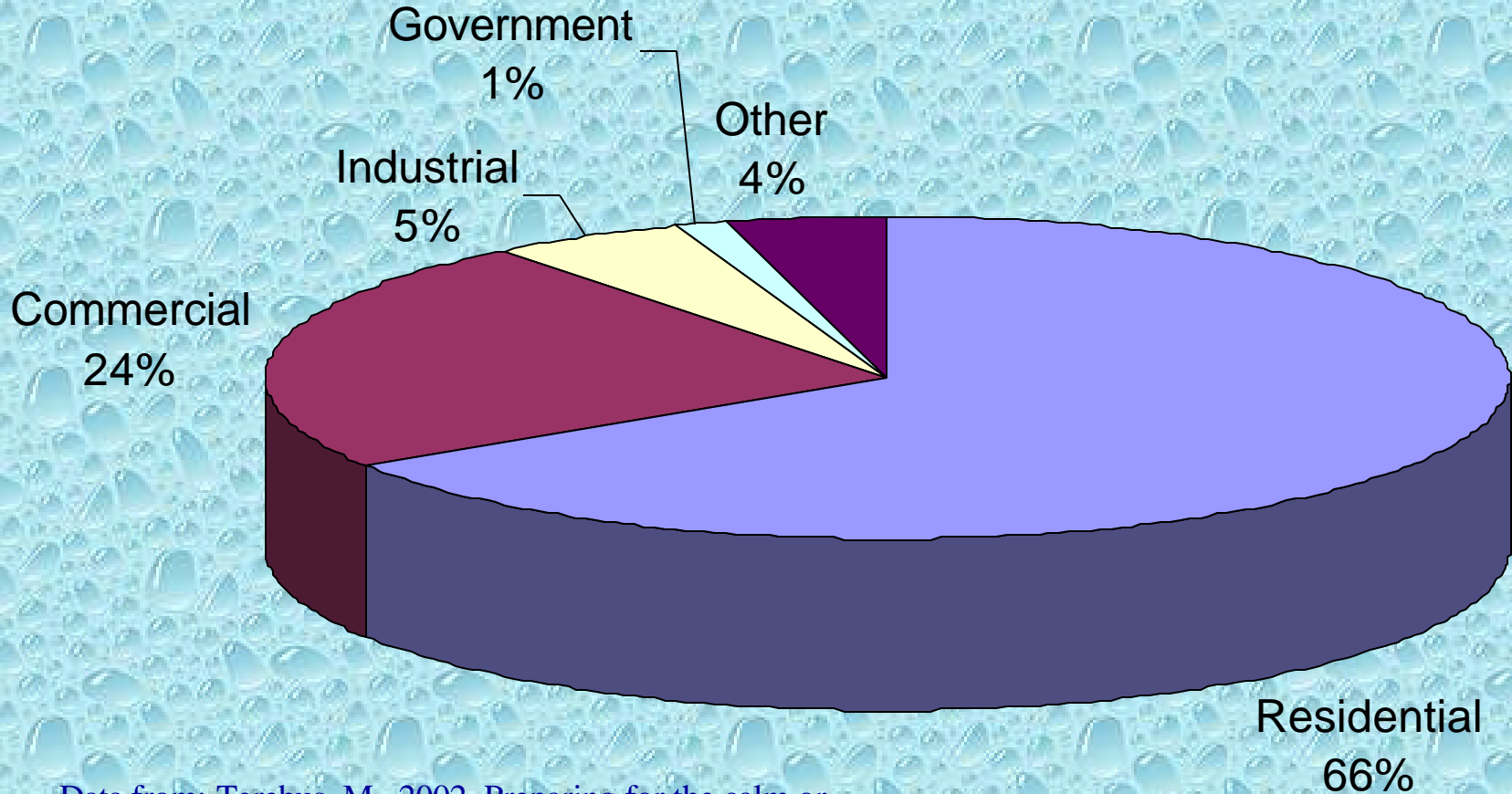
Total = 22 MGD



Data from: Estimated Use of Water in the
United States in 1995, USGS Circular 1200

Water Use by Category - WSSMP 1998

Total = ~72 MGD

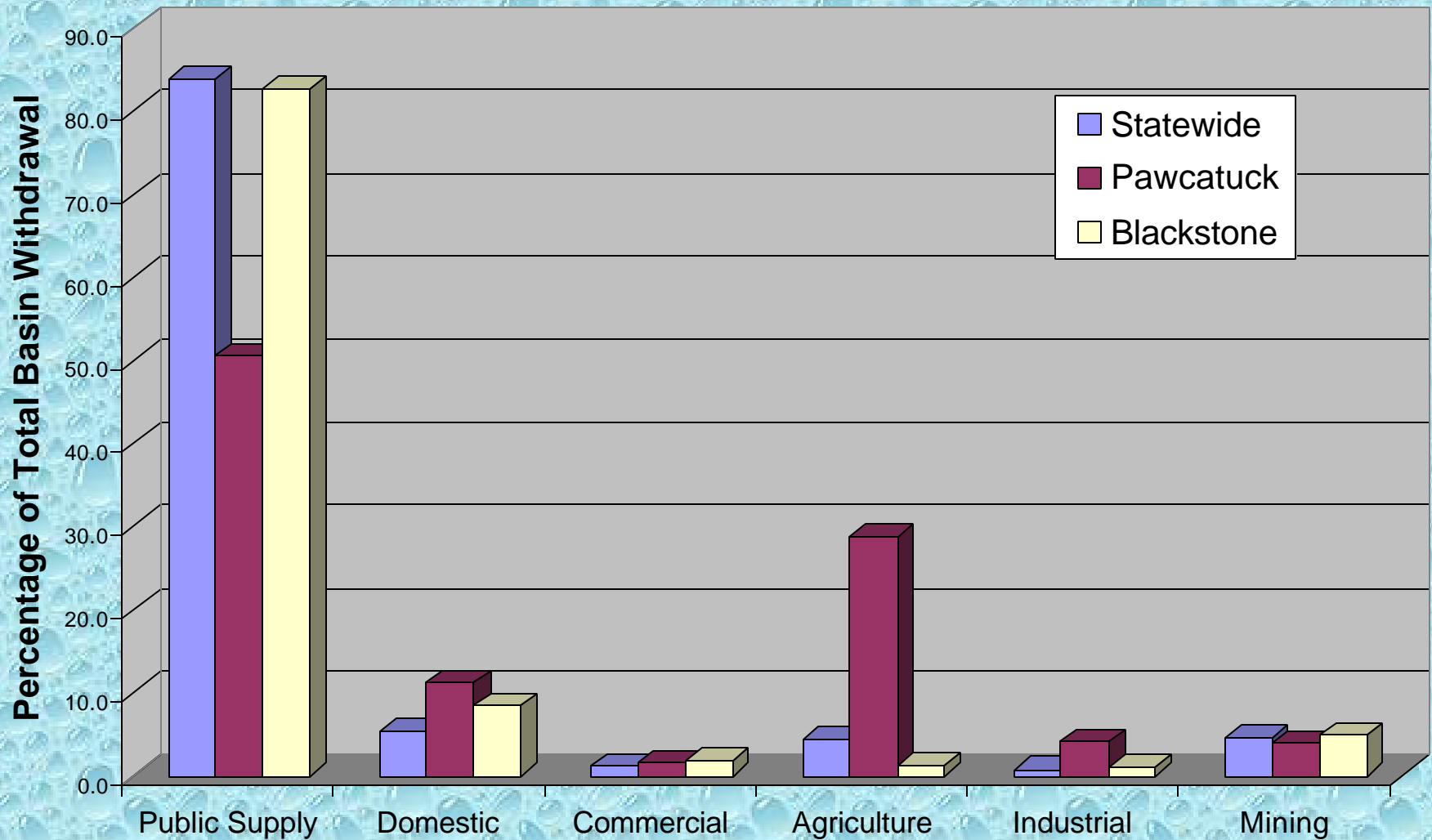


Data from: Terebus, M., 2002, Preparing for the calm or relying on the storm, the Rhode Island Water System Supply Management Plan.

Pilot Basin Comparisons



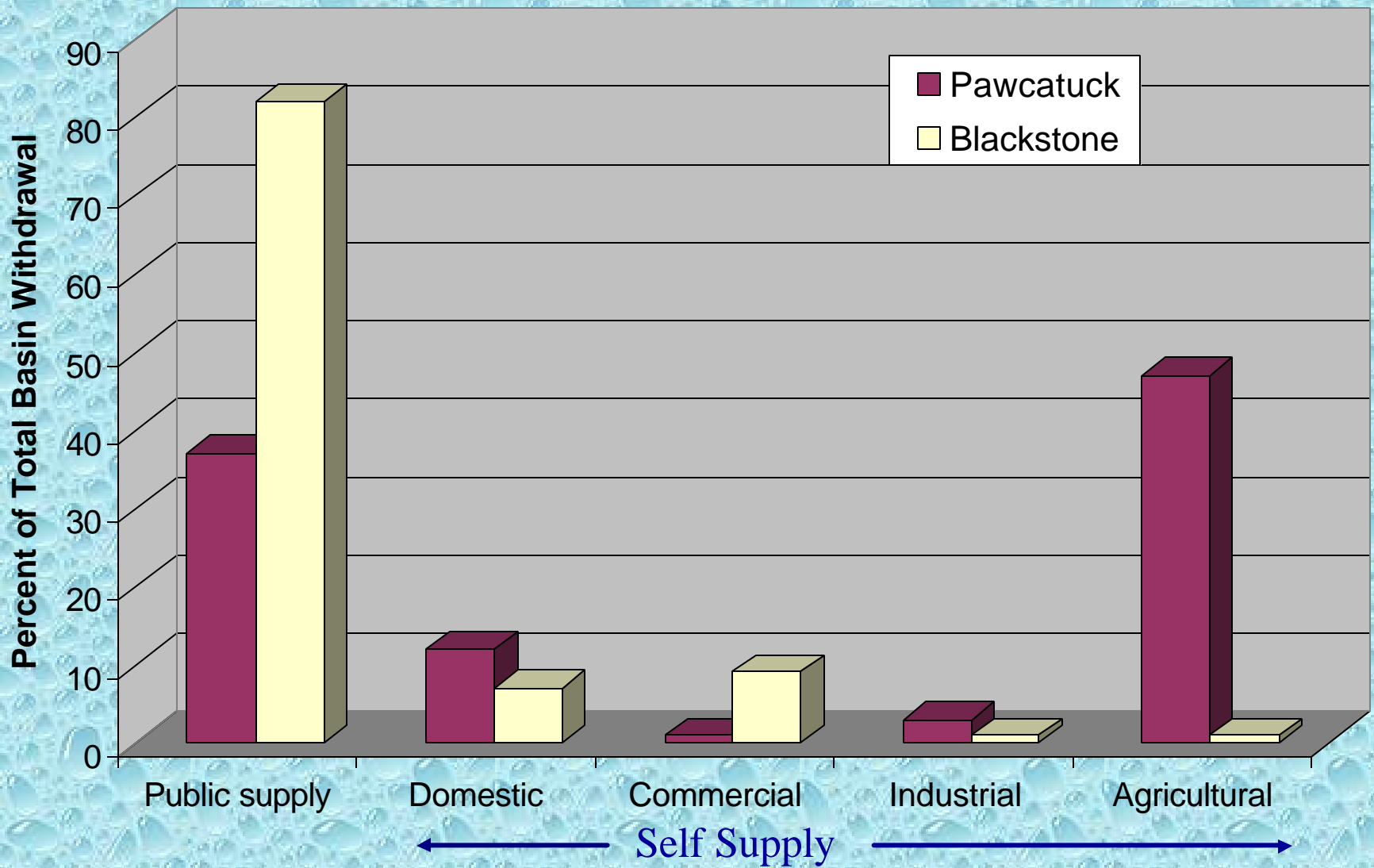
Water Withdrawal Comparison - Rhode Island 1995



← Self Supply →

Data from: USGS, 2000 written communication

Water Withdrawal Comparison - Rhode Island 2000

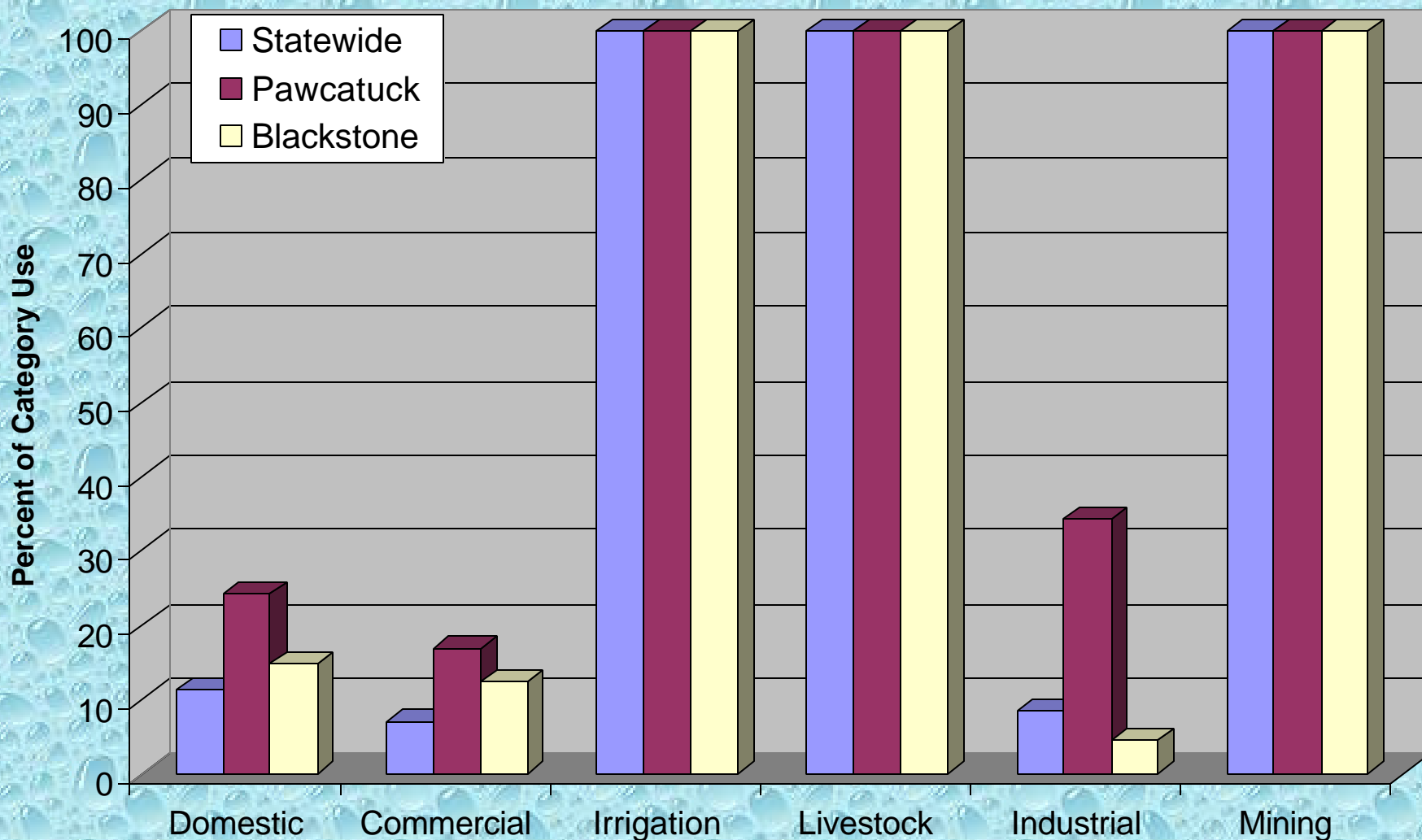


Data from: USGS, 2000 written communication

Data Gaps



Self Supply Percentage of Use by Category - Rhode Island 1995

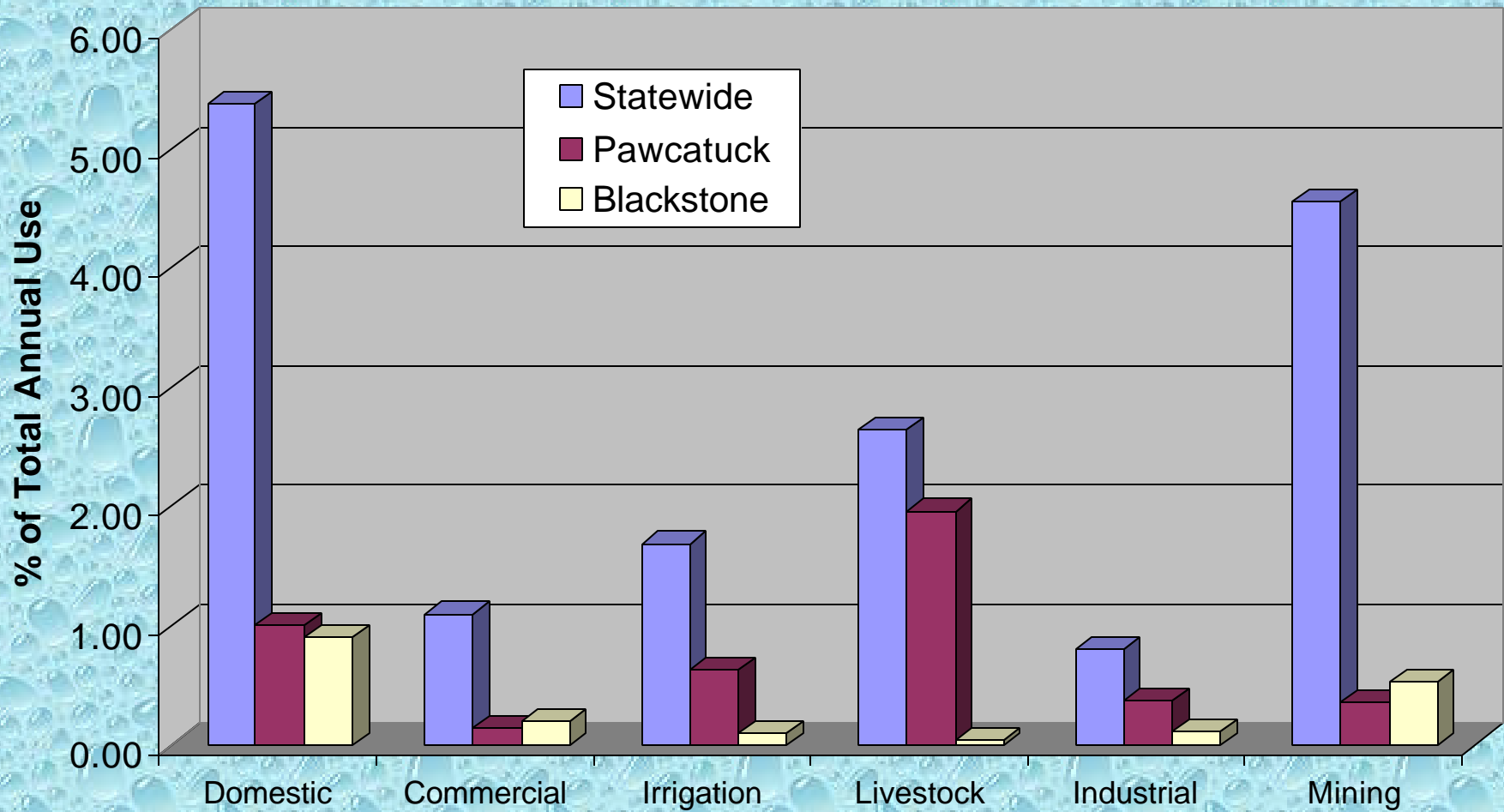


Data from: Estimated Use of Water in the
United States in 1995, USGS Circular 1200

Source of Withdrawal Data

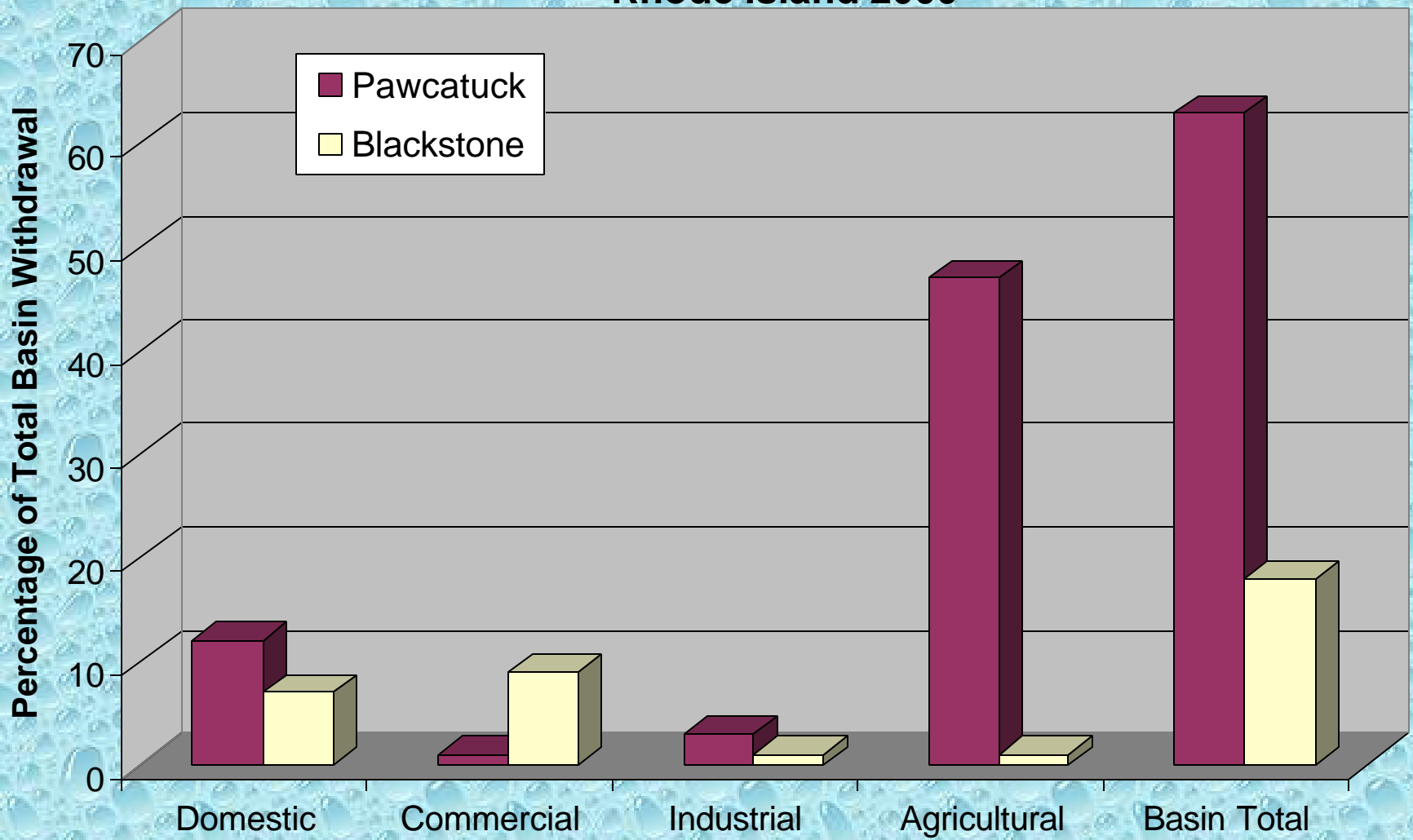
Water Withdrawals	Type of Data
Public Supply Withdrawals	metered
Domestic Self-supplied withdrawals	estimated based on public supply (71 gal/d/person)
Commercial Self-supplied withdrawals	estimated (based on SIC code)
Industrial Self-supplied withdrawals	estimated (based on SIC code)
Agricultural Self-supplied withdrawals	estimated based on agricultural water use coefficients

Self-Supply as Percentage of Total Annual Rhode Island Water Use 1995



Data from: Estimated Use of Water in the
United States in 1995, USGS Circular 1200

Self Supply Withdrawal as a Percentage of Total Withdrawal Rhode Island 2000



Data from: USGS, 2000 written communication

Summary

- Un-metered water withdrawals comprise approximately 16% of total State withdrawals.
- Un-metered withdrawals vary considerably between the Pawcatuck (63%) and the Blackstone (18%).
- Significant data gaps include domestic (12%) and agricultural (47%) withdrawals the Pawcatuck and commercial (9%) withdrawals in the Blackstone.